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## The Relationship of Scoring Above or Below the 75th Percentile on the Kuder Preference Record to General Aptitude, Vocational Attitudes and Occupational Values

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THE RELATIONSHIP OF SCORING ABOVE OR BELOW THE 75TH PERCENTILE  
ON THE KUDER PREFERENCE RECORD TO GENERAL APTITUDE,  
VOCATIONAL ATTITUDES AND OCCUPATIONAL VALUES

by

Terry Joseph Orme

A thesis submitted in partial fulfillment of  
the requirements for the degree

of

MASTER OF SCIENCE

in

PSYCHOLOGY

Approved:

UTAH STATE UNIVERSITY  
Logan, Utah

1973

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Terry Joseph Orme

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## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS . . . . .	ii
LIST OF TABLES . . . . .	v
ABSTRACT . . . . .	vi
CHAPTER I. INTRODUCTION . . . . .	1
Origin and Nature of Problem . . . . .	1
Problem . . . . .	3
Purposes and Objectives . . . . .	3
Definition of Terms . . . . .	4
CHAPTER II. REVIEW OF LITERATURE . . . . .	5
Vocational Interests . . . . .	5
Vocational Attitudes . . . . .	7
Occupational Values . . . . .	8
Vocational Aptitudes . . . . .	9
Summary . . . . .	11
CHAPTER III. METHODOLOGY . . . . .	12
Sample . . . . .	12
Instruments . . . . .	12
The Kuder Preference Record Form CH . . . . .	12
The General Aptitude Test Battery (GATB) . . . . .	14
The Vocational Development Inventory-Attitude Scale (VDI) . . . . .	14
The Occupational Values Inventory (OVI) . . . . .	14
Administration . . . . .	15
Procedure . . . . .	15
Hypotheses to be Tested . . . . .	16
CHAPTER IV. RESULTS . . . . .	17
Relationships of the Variables . . . . .	17
Comparison of the Two Student Groups . . . . .	19
CHAPTER V. CONCLUSIONS AND IMPLICATIONS . . . . .	24
Conclusions . . . . .	24
Limitations . . . . .	25
Implications . . . . .	26



## TABLE OF CONTENTS (Continued)

	Page
BIBLIOGRAPHY . . . . .	28
VITA . . . . .	32

## LIST OF TABLES

Table	Page
1. List of schools and number of students used in the study . .	13
2. Simple correlation matrix of Kuder groups and variables, N = 248 . . . . .	18
3. Analysis of variance data testing differences between Kuder groups on the G scale of the GATB . . . . .	20
4. Analysis of variance data testing differences between Kuder groups on the VDI . . . . .	21
5. Analysis of variance data testing differences between Kuder groups on Value 1 (Interest and Satisfaction) of the OVI . .	22
6. Analysis of variance data testing differences between Kuder groups on Value 3 (Salary) of the OVI . . . . .	22
7. Analysis of variance data testing differences between Kuder groups on Value 4 (Prestige) of the OVI . . . . .	23
8. Analysis of variance data testing differences between Kuder groups on Value 7 (Security) of the OVI . . . . .	23

## ABSTRACT

The Relationship of Scoring Above or Below the 75th Percentile  
on the Kuder Preference Record to General Aptitude,  
Vocational Attitudes and Occupational Values

by

Terry Joseph Orme, Master of Science

Utah State University, 1973

Major Professor: Dr. Michael Bertoch

Department: Psychology

This study was designed to investigate the relationship of general aptitude, vocational attitudes, and occupational values to scoring above or below the 75th percentile on the Kuder Preference Record by ninth grade students in rural southwestern Utah and southeastern Idaho.

The sample consisted of a group of 248 students who participated in Project Mace. The students were divided into two groups according to their Kuder percentile scores. The G scale of the General Aptitude Test Battery, the Vocational Development Inventory, and the Occupational Values Inventory were also administered to the subjects. The data were analyzed by a simple correlation matrix and analysis of variance.

The results of the study indicated there was no significant difference between the two groups on any of the instruments.

The implications from the results indicated that:

1. The 75th percentile probably should not be used as a criterion for strong interests, at least when an attempt is being made to

relate interests to the general aptitude, attitudes, and values measured in this study.

2. More research is needed in order to fully understand the relationship of interests, aptitudes, attitudes and values.
3. More research is needed on the instruments used in this study, especially the Occupational Values Inventory and the Vocational Development Inventory.

(37 pages)

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## CHAPTER I

### INTRODUCTION

#### Origin and Nature of Problem

For many years researchers have been concerned with the relationship of vocational interests to vocational development. Super (1962), Crites (1961), Holland (1958), and Ginzberg (1951) have all stressed the importance of vocational interests in their theories of vocational development. They all concur that in order for vocational development to occur, vocational interests must be present; however, they do not agree to what extent. Darley and Hagenah (1955) have reviewed the efforts of researchers to measure and categorize vocational interests and they conclude that vocational interests are largely developmental, they can be measured, and present interest inventories are better than self-report techniques.

While working on a recent research project (MACE 1970-71) concerned with assisting the career exploration and vocational development of ninth grade students, it appeared to the writer that some students may have received less help than others because they lacked vocational interests, as determined by scores obtained from the Kuder Preference Record, a commonly used interest inventory. Since having vocational interests is related to vocational development, it is important to know what factors contribute to them and if these factors were known it could enable counselors and others to better guide a student's vocational choice.

Upon searching for these factors, the writer discovered that in discussing vocational interests, researchers also discuss vocational maturity, occupational values, and aptitudes (Crites, 1969; Thompson, 1965; Holland, 1964; Katz, 1963; Tiedeman, 1963; and Super, 1962).

Crites has emphasized that vocational maturity is related to intelligence (grades), work values (self-report), and occupational preferences (interests as measured by the Strong Vocational Interest Blank). It was with this in mind that he developed the Vocational Development Inventory (VDI), the only instrument yet devised to measure vocational maturity and attitudes. However, there is presently a lack of research concerning the relationship of the VDI to interests.

Many researchers have also stressed the importance of occupational or work values and the interrelatedness of interests with them in the process of vocational choice (Super, Thompson, Katz, and Holland). Impellitteri (1970) concluded, after an extensive factor analysis of eight existing value inventories, that a new one needed to be constructed in order to measure occupational values consistently. The Occupational Values Inventory (OVI) is an outgrowth of his work and, as of yet, studies have not been conducted concerning its relationship to interests.

The G scale of the General Aptitude Test Battery (GATB) is a frequently used measure of scholastic aptitude or intelligence and extensive research has been conducted correlating it with other factors. The OVI, VDI, and Kuder Preference Record have all been correlated with it, however, these correlations have been separate instead of multiple.

It appears, then, that vocational interests are interrelated with

other factors, of which occupational values, attitudes, and aptitudes seem prominent and well-defined. As yet, however, no studies have been conducted to show the degree or amount of this interrelatedness.

### Problem

The problem with which this study deals is the lack of research which exists concerning the relationship of occupational values, attitudes, and aptitudes to interests.

### Purposes and Objectives

The purpose of this research will be to investigate the relationship of vocational attitudes, occupational values, and vocational aptitude to scoring on the Kuder Preference Record by ninth grade students in rural southwestern Utah and southeastern Idaho. It is hoped that if a relationship is found, the degree of variable interaction can also be discovered and that the results of this research will aid Project MSCE counslors, as well as other counselors engaged in vocational counseling in similar circumstances.

The objectives of this research will be to determine the relationship between student scoring above and below the 75th percentile on the Kuder Performance Record, Form CH and their (1) vocational attitudes as measured by the Vocational Development Inventory (VDI), (2) occupational values as measured by the Occupational Values Inventory (OVI), (3) general aptitude as measured by the G score of the General Aptitude Test Battery (BATB), and (4) to determine the degree of interaction of the above mentioned variables with scoring on the Kuder.

### Definition of Terms

To help clarify the variables under consideration in this study, the following definitions have been established:

1. Interests -- a readiness to be concerned with as is related to occupations or vocations (Kuder Preference Record).
2. Values -- importance or personal worth regarding vocations or occupations (Occupational Values Inventory).
3. Attitudes -- feeling or emotion toward vocations or occupations (Vocational Development Inventory).
4. General aptitude -- ability to perform or function at an occupation or vocation (G scale of the General Aptitude Test Battery).



## CHAPTER II

### REVIEW OF LITERATURE

The review of literature is divided into various segments of research: (a) vocational interests, (b) vocational attitudes, (c) occupational values, and (d) vocational aptitudes.

#### Vocational Interests

A great deal of research has been conducted in the area of vocational interests and their assessment. Darley and Hagenah (1955) have presented an excellent review of attempts at interest assessment with primary attention given to the Kuder Preference Record and the Strong Vocational Interest Blank (SVIB). They conclude that these interest inventories report vocational interests more accurately and reliably than students using self-report or questionnaire techniques. They also conclude that the Kuder Preference Record is best used with junior and high school age students because its major purpose is to indicate relative interest in a small number of broad areas, rather than in specific occupations as does the SVIB which is best used with older students and adults.

The Kuder Preference Record is currently available in several forms, most of which are ipsative and vary in number of scales, total length, and in the use of scoring techniques. The Kuder Preference Record (Form CH) is the most popular of these forms and is most frequently quoted in the research.

Studies utilizing the Kuder Preference Record (Form CH) encompass a wide domain and reflect the complexity of vocational interests. Among the most important issues considered by them are: the stability of vocational interests, job satisfaction, fakability, and interrelatedness with other variables.

Studies on the stability of vocational interests as measured by the Kuder are conflicting, perhaps because too few of them are long range or longitudinal. White (1958) has shown that interests tend to remain fairly stable after the ninth grade for at least five years. Tutton (1955), Rosenberg (1953), and Mallinson and Crumbine (1952) found that interests are as stable in high school as in college. However, Long and Perry (1953) found very low retest correlations ( $-.22$  to  $.66$ ) over a four year period and concluded that most interests as measured by the Kuder are unstable. Anastasi (1954) also states shifts in high and low interest areas are frequent when retests are several years apart. Kuder (1964) summarizes these and other findings by stating:

The stability of interests varies from person to person and is dependent upon such things as age, the interval between testings, what happens to him during the interval, and particularly how strong his interests are. Other things being equal, the younger the person is, the less stable his interests are likely to be. Nevertheless, beginning with the seventh grade the student begins to have strongly developed interests which tend to remain more or less stable. (page 7)

Lipsett and Wilson (1954) and McRae (1959) found in job satisfaction studies using the Kuder, that a strong positive relationship exists between measured interests and job satisfaction. McRae stated, "Given the required abilities, the young person who enters an occupation consistent with his interests is more likely to be a satisfied

worker than the person who does not." (McRae, 1959)

Studies on the fakability of the Kuder have shown that faking is possible to some extent, however, Mayo (1959) concludes that "faking is usually not observable even when ample opportunity is provided to do so." Faking, therefore, is not usually a factor affecting the outcome of the test.

Many studies have shown that vocational interests are related to other variables. Crites (1969) has emphasized that occupational preferences are related to vocational attitudes; Gribbons and Lohnes (1965) and Thompson (1966) have confirmed that vocational interests and occupational values are related and Buel (1959) and Springbob and Jackson (1963) have found that aptitudes are related to vocational interests. The following sections will be devoted to a discussion of each of these variables and their relatedness to scoring on the Kuder Preference Record.

#### Vocational Attitudes

Crites (1961) demonstrated that vocational attitudes are an essential part of vocational maturity and the vocational choice process. Hall and Crites (1963) have shown that vocational maturity is related to intelligence [grades, work values (self-report), and occupational preferences (SVIB)].

Crites (1969) in his manual "The Maturity of Vocational Attitudes in Adolescence" presents a review of research which justifies his attempt to construct an instrument to assess vocational maturity. The Vocational Development Inventory (VDI), when completed, will be

such an instrument. The attitude scale of the VDI has been completed; however, no one has yet used it to determine the relationship of vocational attitudes to vocational interests as measured by the Kuder Preference Record.

### Occupational Values

Super (1953) has long stressed the importance of occupational values in the vocational choice process. He has stated that in order to understand the dynamics of an individual's choice it is important to know his values, interests, and abilities.

Gribbons and Lohnes (1965) and Thompson (1966) both found that the primary value that students have is the value of having an "interesting job." Thompson found this value present in over 90% of the students used in his study. He also found, as did Fliming (1960), that there are no differences in values because of sex. Gribbons and Lohnes also discovered that values tend to remain stable over at least a five year period, eighth grade through high school.

Thompson (1961) observed that students with high scholastic achievement valued the importance of career selections more than low scholastic achievers. He also observed that students from rural areas valued power more than those from urban areas.

Impellitteri (1970), after reviewing eight available occupational value inventories (Super's Work Values Inventory; Weiss' Minnesota Importance Questionnaire; Stefflre's Vocational Values Inventory; Center's Job Values and Desires Questionnaire; Gribbons and Lohnes' "value indicators;" Rosenberg's Ideal Job Scale; and Schaffer's "values

list"), concluded that a new inventory was needed in order to assess all "known demensions of vocational values." He based this conclusion on the fact that no single inventory accounted for: (1) the measurement of the entire value domain; (2) the ipsative nature of values incorporated into the measurement scheme; and (3) the factor of value intensity. The Occupational Value Inventory (OVI) is an outgrowth of this need, however, it has not yet been used to measure the relationship of vocational interests to occupational values.

### Vocational Aptitudes

Buel (1959), in a "study of scholastic achievement as measured by three forms of interest inventory" (SVIB, Kuder Form C, and MVII), found high positive correlations between scholastic achievement and interest scores. Stewart and Roberts (1955) found low positive correlations, generally below .30, between vocational interests and grades in related fields.

Springbob and Jackson (1963) found low positive correlations between tested aptitudes (DAT) and scores on the Kuder. Krippner (1962) also found that boys with high mental ability scored above the 75th percentile on the Kuder. Craven (1961) reports "a slight positive relation between literary interest, a sub-scale of the Kuder, and intelligence and a more significant positive relation between scientific interest and intelligence."

Studies using the G scale of the General Aptitude Test Battery (GATB) also show a relationship between scoring on the Kuder and vocational aptitude. The Bureau of Employment Security (1968) reports

correlations ranging from .10 - .50 when the G scale of the GATB is correlated with the various sub-scales of the Kuder. They also report that age, sex, and the particular Kuder form used affect these correlations; however, they conclude that there is a definite positive correlation between scoring on the G scale and the Kuder Preference Record.

The GATB has also been correlated with the VDI and OVI. Pucel (1970) reports a correlation of .328 between the VDI and the G scale. He concludes that "it appears that more intelligent persons obtain higher scores on the VDI." Moreover, Crites (1969) confirms that there is a relationship between attitude scale of the VDI and intelligence.

In a study designed to investigate the concurrent validity of the OVI, Kapes (1969) found correlations ranging from .29 (Interest and Satisfaction) to -.14 (Security) when the OVI was correlated with the G scale. Five of the seven correlations were significant, however, the correlations obtained for the values of Preparation and Ability and Advancement were not.

The preceding studies indicate that aptitudes are related to interests as well as attitudes and values. They do not indicate, however, the reasons why they are related, due to the fact that they are correlational studies. It is also true that these studies do not account for other factors which may affect the relationships of measured interest to aptitudes. It becomes clear that more research is needed to determine the degree of interrelatedness of vocational interests, vocational attitudes, vocational aptitudes, and occupational values.

### Summary

This review of literature has included a discussion of vocational interests and their measurement. It has also discussed other variables which are related to vocational interests.

It has been determined that the Kuder Preference Record Form CH is the best interest inventory presently available for the measurement of vocational interests of junior and high school age students. It has been determined that the stability of vocational interests, job satisfaction, fakability and interrelatedness with other variables are important issues raised in studies utilizing the Kuder Preference Record.

It has been concluded that there is a relationship between vocational interests and attitudes, values, and aptitudes; however, there is presently a lack of research concerning their interrelatedness.

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### CHAPTER III

#### METHODOLOGY

This chapter includes a discussion of how the research was conducted, what materials were used to obtain the data, and how the data were analyzed.

##### Sample

The sample was selected from ninth grade Project Mace<sup>1</sup> students from whom scores on all four measurements had been obtained. Because of economic factors and student error associated with scoring of the measurements during Project Mace, the Utah students represent a random stratified sample by school according to sex and percent of total representation. All students from Idaho were included. Table 1 contains a list of the number of students from each school. The sample consists of 128 male students and 120 female students.

##### Instruments

##### The Kuder Preference Record Form CH

The Kuder Preference Record is a widely used general interest inventory for measuring ten vocational interest areas. These areas are outdoors, computational, mechanical, scientific, literary, artistic,

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<sup>1</sup>Project MACE involved about 1500 students from southeastern and south-central Utah junior and senior high schools and two southeastern Idaho high schools.



Table 1. List of schools and number of students used in the study.

School	Location	Number of Students
Valley High School	Orderville, Utah	3
Washington High School	Hurricane, Utah	5
Woodward Junior High School	St. George, Utah	27
Kanab High School	Kanab, Utah	4
Wayne High School	Bicknell, Utah	4
Gunnison High School	Gunnison, Utah	12
Ephriam Junior High School	Ephriam, Utah	20
Bryce Valley High School	Tropic, Utah	3
Escalante High School	Escalante, Utah	13
Panguitch High School	Panguitch, Utah	5
Piute High School	Junction, Utah	4
Cedar City Junior High School	Cedar City, Utah	19
South Fremont Junior High School	St. Anthony, Idaho	80
Teton High School	Driggs, Idaho	49

persuasive, music, clerical, and social service. The Kuder Preference Record yields a percentile score for each area. Any area with a score at the 75th percentile is defined by Kuder (1960) as a "strong" area and Kuder (1960) reports that "strong" areas have a "tendency toward stability" whereas no prediction can be made from interest areas with

scores lower than the 75th percentile. The 75th percentile also represents "a point between the one and five percent points of significance for normally distributed scores from tests having a reliability of .90." (Manual, p. 15)

The scores from the outdoor scale were not used in this study for lack of research supporting its usefulness as a predictor of vocational interests (Craven, 1961). In addition, it was felt that since the sample was rural the subjects would be largely outdoor oriented.

#### The General Aptitude Test Battery (GATB)

The GATB's G scale is widely used as an indicator of general academic aptitude and it yields one score that may be converted to normative data expressed in levels (1 to 12+).

#### The Vocational Development Inventory-Attitude Scale (VDI)

The VDI is a newly designed (Crites, 1961) test of vocational maturity. The VDI yields one mean score based upon the interaction of five variables (Crites, 1958, 1961): (1) independence in choice process, (2) orientation toward work, (3) independence in decision making, (4) preference for vocational choice factors, and (5) conceptions of the choice process.

#### The Occupational Values Inventory (OVI)

The OVI is a newly designed inventory of occupational values (Impellitteri and Kapes, 1970). It was developed after a survey of other existing value inventories was made and the authors (Impellitteri and Kapes) state that the OVI measures seven values. These seven values

are: (1) interest and satisfaction, (2) advancement, (3) salary, (4) prestige, (5) personal goal, (6) preparation and ability, and (7) security.

#### Administration

1. The Kuder Preference Record was administered during the school year 1969-70 to the Utah students and during 1970-71 to the Idaho students by their school counselors.

2. The GATB was administered to the Utah students during 1969-70 and to the Idaho students during 1970-71 by the local state employment security office.

3. The OVI and VDI were administered to the Utah students during 1969-70 by the Project MACE counselor. The Idaho students were given the OVI and VDI during 1970-71 by the Project MACE Personnel.

#### Procedure

The students were divided into two groups, one consisting of those who scored at or above the 75th percentile on one or more of the Kuder areas, and the other consisting of those who failed to score at the 75th percentile in any area. The first group contained 225 students of whom 114 were male, while the second group had a membership of only 13 male and 10 female students.

After the students were divided into two groups, their GATB G level was recorded along with their VDI and OVI scores.

### Hypotheses to be Tested

1. Students who score above the 75th percentile on one or more scales of the Kuder Preference Record will have significantly higher scores on the G scale of the GATB than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record.

2. Students who score above the 75th percentile on one or more scales of the Kuder Preference Record will have significantly higher vocational maturity scores on the VDI than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record.

3. Students who score above the 75th percentile on one or more scales of the Kuder Preference Record will have significantly higher scores on Values 1, 3, 4, and 7 of the OVI than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record.

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## CHAPTER IV

## RESULTS

The results of this research are presented in two sections: relationships of the variables and comparison of the two student groups.

Relationships of the Variables

To assist the reader in interpreting the relationships among the variables that were investigated in this study, Table 2 illustrates the inter-correlations of all variables.

The correlations reported in Table 2 are based on an N of 248 students. For this N, a correlation of at least .138 is necessary for statistical significance at the .05 level of confidence. At the .01 level of confidence, a correlation of .181 is required. For discussion purposes, however, the writer is concerned primarily with those correlations which account for approximately ten percent (.333) or more of the variance.

Since the first variable in the matrix does not correlate significantly with any of the other variables, it can probably be inferred that Kuder group membership is not closely related to the results obtained on the other variables under consideration.

The second variable, scoring on the GATB, correlates significantly with VDI scores and OVI scores on Values 1 (Interest and Satisfaction) and 4 (Prestige). The GATB-VDI correlation accounts for 11.7 percent

of the variance and therefore indicates some commonality. The GATB-OVI correlations, while significant at the .01 level of confidence, indicate that the variables are discrete.

The third variable, scoring on the VDI, correlates significantly with OVI scores on Values 1 (Interest and Satisfaction), 3 (Salary), and 4 (Prestige). Since none of the correlations account for as much as ten percent of the variance, it can be concluded that these variables are also discrete.

Table 2. Simple correlation matrix of Kuder groups and variables, N = 248.

Variables	2	3	4	5	6	7
Kuder Groups	.0105	.0253	.0715	-.1137	.0884	-.0024
G Score of GATB		.3423	.1768	-.0226	-.1677	.0363
VDI Score Attitude			.3238	-.1746	-.1833	-.0677
OVI-1 Interest & Satisfaction				-.4490	-.0333	-.1972
OVI-3 Salary					-.1466	-.2008
OVI-4 Prestige						-.1600
OVI-7 Security						

The fourth variable, Value 1 of the OVI, correlates negatively and significantly with OVI scores on Values 3 and 7. The correlation

between Value 1 (Interest and Satisfaction) and Value 7 (Security) is small and hence variables 1 and 7 are discrete; however, the correlation between Value 1 and Value 3 is negative and accounts for 20.16 percent of the variance. It appears then, that OVI Values 1 and 3 are somewhat opposite, thus students who score high on Value 1 (Interest and Satisfaction) will likely score lower on Value 3 (Salary).

The fifth variable, Value 3 of the OVI, correlates negatively and significantly with OVI scores on Values 4 and 7. Again these correlations account for less than ten percent of the variance and therefore variables 5, 6, and 7 appear to be discrete.

It can be concluded then, from these correlations, group membership is probably not related to the other variables and that they are discrete. It appears then that the instruments used in this study measure different traits and that further analysis is justified and needed in order to gain a clearer perspective of the research results.

#### Comparison of the Two Student Groups

The first hypothesis states that students who score above the 75th percentile on one or more of the Kuder Preference Record's scales will have significantly higher scores on the G scale of the GATB than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record. Data for the analysis of variance on this variable are presented in Table 3. The F value of 1.4993, with 1.246 degrees of freedom, is not significant and indicates that there is no real difference between the G scores of either group. Therefore, the first hypothesis must be rejected.

Table 3. Analysis of variance data testing differences between Kuder groups on the G scale of the GATB.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	11.3047	1	11.3047	1.4993
Within Groups	1854.7880	246	7.5398	
TOTAL	1866.0927	247		

Kuder Group 1 (Above 75%) Mean = 7.258

Kuder Group 2 (Below 75%) Mean = 6.522

The second hypothesis states that students who score above the 75th percentile on one or more scales of the Kuder Preference Record will have significantly higher scores on the VDI than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record. Data for the analysis of variance on this variable are presented in Table 4. The F value of .6674, with 1.246 degrees of freedom is not significant and indicates that there is no real difference between the VDI scores of either group. The second hypothesis must also be rejected.

The third hypothesis states that students who score above the 75th percentile on one or more scales of the Kuder Preference Record will have significantly higher scores on Values 1 (Interest and Satisfaction), 3 (Salary), 4 (Prestige), and 7 (Security) of the OVI than those students who score below the 75th percentile on all of the scales of the Kuder Preference Record. Data for the analysis of variance on



Table 4. Analysis of variance data testing differences between Kuder groups on the VDI.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	17.5877	1	17.5877	.66774
Within Groups	6479.4088	246	26.3391	
TOTAL	6496.9965	247		

Kuder Group 1 (Above 75%) Mean = 33.831

Kuder Group 2 (Below 75%) Mean = 32.913

these variables are presented in Tables 5, 6, 7, and 8. The respective F values of 1.9298, 3.2986, .0189, and 3.8436, all with 1.246 degrees of freedom, are not significant. Therefore there is no real difference between the OVI scores of either group and hypothesis number three must be rejected.

Table 5. Analysis of variance data testing differences between Kuder groups on Value 1 (Interest and Satisfaction) of the OVI.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	45.4924	1	45.4924	1.9298
Within Groups	5799.1170	246	23.5736	
TOTAL	5844.6094	247		

Kuder Group 1 (Above 75%) Mean = 20.52

Kuder Group 2 (Below 75%) Mean = 19.043

Table 6. Analysis of variance data testing differences between Kuder groups on Value 3 (Salary) of the OVI.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	143.0595	1	143.0595	3.2986
Within Groups	10668.8600	246	43.3694	
TOTAL	10811.9195	247		

Kuder Group 1 (Above 75%) Mean = 12.555

Kuder Group 2 (Below 75%) Mean = 15.174

Table 7. Analysis of variance data testing differences between Kuder groups on Value 4 (Prestige) of the OVI.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	.4632	1	.4632	.0189
Within Groups	6028.6300	246	24.5066	
TOTAL	6029.0932	247		

Kuder Group 1 (Above 75%) Mean = 10.453

Kuder Group 2 (Below 75%) Mean = 10.304

Table 8. Analysis of variance data testing differences between Kuder groups on Value 7 (Security) of the OVI.

	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between Groups	106.0248	1	106.0248	3.8436
Within Groups	6785.8740	246	27.5849	
TOTAL	6891.8988	247		

Kudar Group 1 (Above 75%) Mean = 10.689

Kudar Group 2 (Below 75%) Mean = 8.435

## CHAPTER V

### CONCLUSIONS AND IMPLICATIONS

The purpose of this research was to investigate the relationship of vocational attitudes, occupational values, and general aptitude to scoring on the Kuder Preference Record by ninth grade students in rural southwestern Utah and southeastern Idaho.

The subjects were ninth grade students from whom complete test results had been obtained and who participated in Project MACE. The sample consisted of 128 male students and 120 female students.

After the Kuder Preference Record, Form CH was administered, the students were divided into two groups. Those students who scored above the 75th percentile on one or more of the scales were assigned to one group, while those who failed to score above the 75th percentile on any of the scales were assigned to the other group.

The subjects were also administered the Occupational Values Inventory (OVI), the Vocational Development Inventory-Attitude Scale (VDI), and the G scale of the General Aptitude Test Battery (GATB).

The data obtained from the subjects were used to test three hypotheses which compared mean differences between the two Kuder groups using scores from the G scale of the GATB, the VDI, and the OVI.

#### Conclusions

The results obtained from the mean comparisons indicate that:

1. General aptitude as measured by the G scale of GATB appears not

to be related to scoring above or below the 75th percentile on the Kuder Preference Record.

2. Vocational attitudes as measured by the VDI appear not to be related to scoring above or below the 75th percentile on the Kuder Preference Record.
3. Occupational values as measured by the OVI also appear not to be related to scoring above or below the 75th percentile on the Kuder Preference Record.

It therefore appears that scoring above or below the 75th percentile on the Kuder Preference Record is independent of general aptitude, vocational attitudes, and occupational values as defined by the G scale of the GATB, the VDI, and the OVI.

#### Limitations

The limitations of this study were:

1. In spite of Kuder's extensive research which indicates the 75th percentile is a significant level for interest assessment, the ipsative nature of the Kuder Preference Record suggests its scores be considered in a rank order manner rather than normatively. If this suggestion is valid, placing students into groups as determined by scoring above or below the 75th percentile may be meaningless.
2. The discrepancy between the size of the groups in this study was resolved by the use of a statistical technique which adjusts for mean size.

3. The reader should keep in mind, the sample consists only of a rural population. In order to broaden the generalizability of this study, students from urban areas should also be included.
4. Since the research on the OVI and VDI is extremely limited, these instruments should be used with caution. This statement is reinforced by the investigator's observation that those students who scored high on the VDI also obtained high G scores on the GATB. It was also true that those students who scored low on the VDI obtained low G scores. Therefore, it appears from this observation that the G scale of the GATB and the VDI may be measuring the same things.

#### Implications

It appears to the writer that the implications of this study are:

1. The use of the 75th percentile as a criterion for strong interests may not be valid. Since general aptitude, vocational attitudes, and occupational values have previously been shown to be related to vocational interests, these students who score above the 75th percentile should be different than those students who do not. Since there was no difference between the two Kuder groups in this study this implication may be valid.
2. More research is needed in order to fully understand the relationship of interests, aptitudes, attitudes, and values. Even though this relationship has been shown, it is at best vague and inconclusive.

3. More research is needed on the instruments used in this study, especially the VDI and the OVI. It appears that the VDI may not clearly discriminate attitudes from general aptitude and the OVI presently measures only four of seven values with any validity.

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## VITA

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